

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number  
**WO 2005/081225 A1**

(51) International Patent Classification<sup>7</sup>: **G10H 3/18**

(21) International Application Number:  
PCT/FI2005/000111

(22) International Filing Date: 23 February 2005 (23.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
20040277 23 February 2004 (23.02.2004) FI

(71) Applicant (for all designated States except US): **B-BAND OY** [FI/FI]; Konttisentie 8 B, FI-40800 Vaajakoski (FI).

(72) Inventor; and  
(75) Inventor/Applicant (for US only): **RÄISÄNEN, Helkki** [FI/FI]; Muurarintie 11 C, FI-40520 Jyväskylä (FI).

(74) Agent: **HEINÄNEN OY**; Annankatu 31-33 C, FI-00100 Helsinki (FI).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EG, ES, FI,

GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

— of Inventorship (Rule 4.17(iv)) for US only

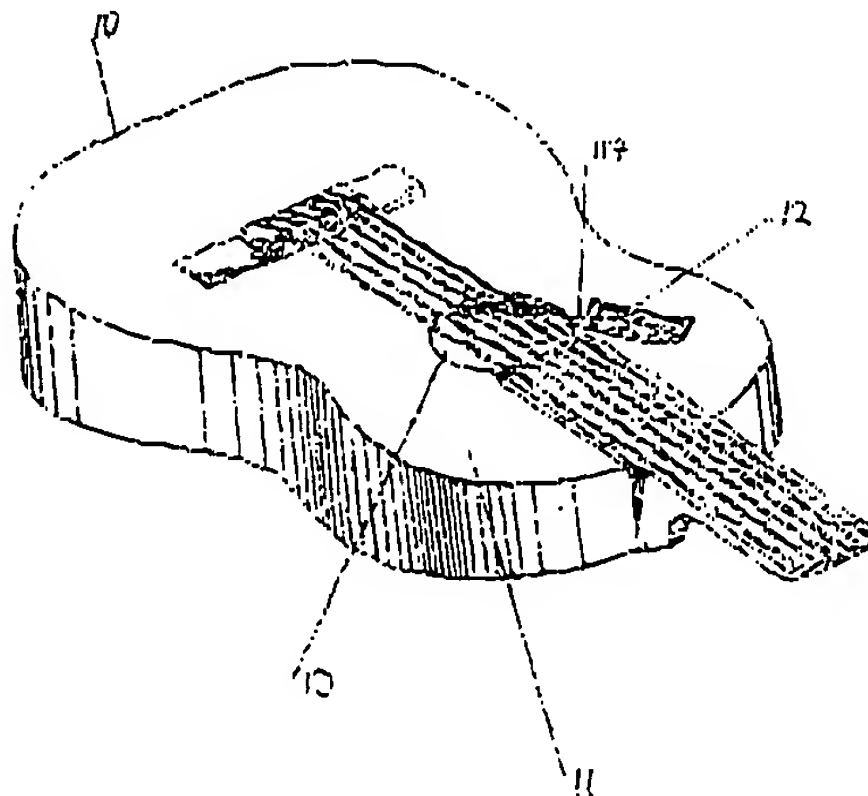
**Published:**

— with international search report

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **ACOUSTIC GUITAR CONTROL UNIT**



(57) Abstract: An electromechanical control unit (12) for a musical instrument having keypad and/or touch pad areas (102) for controlling a signal processing unit, wherein the control unit (12) includes a surface element (101), whereby settings and values of said signal processing unit that can be changed by the user are controlled by touching of the surface element, which surface element has keypad and/or touch areas (102) provided with fixed and/or alternating symbols whereby changeable parameter values of the signal processing unit are controlled by touching and/or by gliding on said symbol with finger(s) or some other means, and wherein in order to adjust the parameter values that can be changed by the user the control unit consists of a thin and elastic layered structure whereby touching it generates there between the electrode surfaces a charge or voltage or capacitance change the place and/or amplitude of which is calculated with a microprocessor or alike, and based on this information said changeable parameter values are changed.

BEST AVAILABLE COPY

WO 2005/081225 A1